EXHIBIT 5

DECLARATION OF J. BUFORD BOONE, III

I, J. Buford Boone, declare as follows:

1. I have been asked by Plaintiffs to make general comments/observations on subjects related to Illinois HB 5471and declarations of various experts hired by the state of Illinois.

2. I am being compensated for my time in this case at the rate of $700 per hour. My compensation is not contingent on the results of my analysis or the substance of my testimony.

Background and Qualifications

3. I am currently the sole member of Boone Ballistics, LLC and a retired Supervisory Special Agent (SSA) of the Federal Bureau of Investigation (FBI). I was the primary SSA with oversight of the FBI Ballistic Research Facility (BRF) from April 15, 1997 – August 31, 2012.

4. As the Member of Boone Ballistics, LLC, I have been employed as an expert witness in civil and criminal cases. Additionally, I have been employed as a consultant in civil and criminal cases. I teach internal, external and terminal ballistics, including selection of ammunition and weapons for efficiently incapacitating an aggressive human adversary. I have lectured on the applicability of the Hague Convention of 1899 to the selection of ammunition for use by the U.S. Military. I conduct time of flight testing to better document small arms projectile flight as it applies to the use of a Ballistic Coefficient to predict projectile impact at long distances.

5. Prior to my first full-time law enforcement employment, I served as a reserve police officer or Deputy Sheriff with Tuscaloosa County, Alabama, Upson County, Georgia, Las Animas County, Colorado and Trinidad Colorado.

6. Approximately May of 1988 I was hired as a Police Officer with the Tuscaloosa, Alabama, Police Department. I was subsequently offered a position as a Special Agent of the Federal Bureau of Investigation (FBI) in July of 1988. I began employment with the FBI on

07/25/1988. I was graduated from the FBI Academy on 10/21/1988. My first duty station was New Haven, Connecticut.

7. I have maintained an interest in firearms all my adult life. I have shot competitively. My firearms scores at the FBI Academy were sufficiently high to allow me to attempt the "Possible" Club. I was successful on my first attempt. To shoot a "Possible", Agents must fire a perfect score on a very difficult course. Though there were in excess of 10,000 Agents in 1988, my "Possible" was approximately number 1,198 in FBI history.

8. Upon arrival in New Haven, I was assigned to the Reactive Squad conducting background, bank robbery and fugitive investigations. I later served as the Fugitive Coordinator for the New Haven Division. I was named "Detective of the Month" by the Bronx Homicide Task Force for the capture of an America's Most Wanted fugitive.

9. I successfully completed FBI Firearms Instructor School in July of 1989. This qualified me to teach firearms to Field Agents.

10. I was transferred to the Organized Crime/Narcotics Squad in July of 1990. I primarily participated in investigations of drug gangs. These investigations typically involved significant amounts of surveillance, electronic monitoring and the service of multiple search warrants. I also participated in organized crime investigations. I have participated in multiple arrests in urban and suburban areas.

11. I was named the Principal Firearms Instructor (PFI) of the New Haven Division of the FBI in November of 1992. I maintained that position until I transferred to the Firearms Training Unit at the FBI Academy, Quantico, Virginia.

12. As PFI, I oversaw all firearm and defensive tactics training of the 90+ Agents in the New Haven Division of the FBI. I coordinated training sessions for all firearms issued to general Agents. This included revolvers, pistols, carbines and shotguns. It also included coordination of deadly force training with the Principal Legal Advisor. During my time as the PFI, the FBI transitioned from revolvers to semi-automatic pistols. The training for this transition was my responsibility for New Haven Division Agents.

13. In September of 1989 I was admitted to the FBI New Haven Special Weapons and Tactics (SWAT) Team as a Sniper/Observer. I successfully passed both the two week Sniper/Observer and the two week Basic SWAT courses at the FBI Academy. I served operationally on the New Haven SWAT Team until my transfer to the FBI Firearms Training Unit at the FBI Academy, Quantico, Virginia.

14. In March of 1996, I was promoted to a position as a Term GS-14 Firearms Instructor at the Firearms Training Unit (FTU), FBI Academy, Quantico, Va. During this assignment, I performed line and PFI instruction of Agent trainees. I provided or oversaw line and combat instruction in handguns, carbines and shotguns. I also provided judgmental instruction utilizing Firearms Training Simulator (FATS) equipment. The FATS training was used primarily to teach Agents when the use of deadly force was appropriate, and when it was not.

15. I was transferred to the Ballistic Research Facility (BRF) of the FTU on April 15, 1997. I maintained my position at the BRF for more than 15 years, retiring on August 31, 2012. I received a permanent promotion to Supervisory Special Agent in September of 1997.

16. The BRF has responsibility for testing and evaluating all ammunition used operationally by the FBI. The BRF was created following a 1986 shootout wherein a subject was fatally injured by FBI projectiles but continued fighting and ultimately killing two Agents after receiving the “fatal” wound. A thorough investigation revealed the primary cause of the failure to rapidly incapacitate was the projectiles lack of sufficient penetration in the subject’s body. It stopped short of the heart.

17. This investigation spawned research into the mechanics of wound ballistics. Ultimately, the research led to the creation of a scientifically repeatable method of comparing the potential effectiveness of individual cartridges. The resultant test has been referred to as the “FBI Method”. The BRF published test findings available upon official request of Law Enforcement and Military agencies. The BRF became the most trusted source of ballistic information in the Law Enforcement and Military community.

18. As SSA of the BRF, my responsibility was to oversee all aspects of the research. I was the only full-time person at the BRF until a support person (non-Agent) was assigned as an Engineering Technician, Ballistics (ETB), in the last quarter of 1998. I was the Supervisor and rating official of the ETB.

19. As SSA, I performed or directed all functions of the BRF. I hand loaded cartridges, put test firearms together, hand-fired firearms for testing, built tissue simulant blocks, conducted penetration testing and reported on same. I created a relational database to store data and report test results. I operated sophisticated ballistic testing and photographic equipment. I was frequently sought out to train others in the use of this equipment.

20. I was the primary author of specifications for ammunition procurements for the FBI. This included ammunition used for training as well as for operational use, commonly referred to as "Service" ammunition.

21. I was the primary author of the FBI Body Armor Test Protocol at its inception.

22. I directed the creation of a procurement of 5.56mm NATO ammunition using piezoelectric conformal transducers for pressure testing.

23. The BRF served as the primary source of ballistic information regarding ammunition and firearms for all FBI Agents. Field Agents routinely referred local and state partners to me for ballistic information and advice.

24. During my service at the BRF, a strong liaison was formed with the Department of Defense (DOD). The BRF performed testing for and consultation with the DOD on many occasions. My expertise has been, and continues to be, sought out and relied upon by the Special Operations Community. During my service at the BRF, the Department of Defense Law of War Chair established protocol that all new DOD small arms munitions required testing and evaluation by the FBI BRF prior to legal authorization being granted for their use.

25. I have been a participant in a number of government sponsored Integrated Product Teams researching ballistics, including:

Joint Services Wound Ballistics

Lead Free Ammunition
Protective Armor
Armor Piercing Ammunition development

26. In 2002, I traveled to Darligen, Switzerland, at the specific request of the Department of State, to represent the United States in discussions of wound ballistics.

27. I have provided numerous live-fire terminal ballistic demonstrations to local, state and federal law enforcement officers as well as to all branches of the United States Military.

28. I have conducted international presentations on wound ballistics, ammunition selection, weapon selection, sniper operations and body armor.

29. I have briefed the Secretary of the Army and provided, at his request, my professional opinion of a 5.56mm NATO cartridge intended to replace the M855.

30. I have functioned (and continue to) as the primary instructor of 57 Basic Law Enforcement Sniper/Observer schools. Approximately 1,091 students have successfully completed this course under my instruction.

31. I consistently received high performance ratings in the FBI. I received the highest possible, “Outstanding”, each of the last 4 years of my service. I have received numerous letters of commendation and performance awards.

32. I was the 2008 recipient of the National Defense Industrial Association Joint Armaments Committee’s Gunnery Sergeant Carlos Hathcock Award.

33. Publications I authored during my FBI employment and restricted to official law enforcement or government request:

Review of Accuracy 1st Training
Weapon Selection – Revision III
Ammunition Selection 2007
TSWG MURG Briefing Accuracy Expectations
AIM III TSWG Briefing 3/16/2010
Wound Ballistics
B2 Sniper Rifle Cleaning Method

34. Publication I authored during my FBI employment that is publicly available:

FBI Body Armor Test Protocol

35. Publication that I have co-authored that is publicly available:

Terminal Ballistics: The Science of Ballistic Projectile Wounding

36. I currently teach a two-hour basic wound ballistics class for recruits at the Law Enforcement Academy-Tuscaloosa, a branch of the Alabama Peace Officers Standards & Training Commission. I also teach an annual eight hour wound ballistics and ammunition selection class at the Tuscaloosa Police Department, Tuscaloosa, Alabama.

Statements claiming the Restricted weapons are for war, not self-defense

37. In my opinion, statements such as this are inflammatory and misleading. A person reading this statement might reasonably believe that non-restricted weapons are "for self-defense, not war". When one looks into some of these non-restricted weapons, like the bolt-action rifle quoted by other experts, one discovers that bolt-action rifles were, in fact, used as weapons of war. The same can be said of virtually every type of rifle, including those that only accept one cartridge at a time (single-shot rifles) and those that must be loaded from the muzzle.

38. Law enforcement is, obviously, not the same as the military. I am a retired law enforcement officer. My former agency (FBI) uses AR-15 type firearms. I train law enforcement officers and have trained them in the use of AR-15 type firearms. The often quoted mission of law enforcement is "To Protect and Serve". In my experience, the predominant type of rifle currently used by law enforcement is an AR-15 type and is appropriate for that purpose.

39. The State of Illinois apparently agrees with me as the law contains exemptions for law enforcement personnel, including retired officers. It further contains exemptions for government agencies, prison officials and certain private security contractors – none of whom are expected to "go to war" as part of their official duties.

40. Any claim that rifles like the AR-15 are not suited for self-defense is contradicted by a report from the U.S. Bureau of Alcohol, Tobacco, Firearms, and Explosives ("ATF") titled "Data Analysis of .223 Caliber Ammunition," a copy of which is included herewith as **Exhibit A**.

41. This report relies heavily on data from the "FBI Weapons Selection" test that I authored. After comparing the terminal performance of the projectiles launched using typical service cartridges of handguns chambered in 9mm Luger and .40 S&W with those for rifles chambered in .223, the ATF report concludes that a shoulder-fired rifle chambered in .223 is the "weapon of choice."

42. Specifically included was their usefulness inside structures and their threat level to innocent bystanders. The report explained that ballistic studies have shown that certain .223 rounds discharged from a rifle were less likely to over-penetrate barriers commonly found in structures than certain common rounds fired from handguns (9mm and .40S&W) and more likely to provide the recommended level of 12"-18" of penetration.

43. In other words, such rifles are extremely well suited for self-defense, including within confined areas like a home.

44. Based on the above, it is my opinion that every reference resembling "designed for war, not self-defense" should be ignored.

Projectile (bullet) vs. Firearm

45. I have been asked to address a statement that "Because of their mass, velocity, and resulting kinetic energy, AR-15 rounds produce larger cavities in the human body, with devastating effects to tissue and surrounding organs."

46. It is notable that the statement fails to mention any other caliber or cartridge and so is an incomplete comparison. It is further notable that the statement fails to identify the caliber or cartridge for which the referenced AR-15 is chambered.

47. Nonetheless, it is the projectile that causes trauma during a gunshot wound, not the firearm that launched it.

48. The only part of the firearm that influences the performance of the projectile is the barrel. Longer barrels, up to a point, produce higher linear velocity. Faster twist rate barrels produce higher rotational velocity. Because barrel design is irrelevant as to a firearm's status as

an "assault rifle" under the law, the claim that "assault weapons" cause more damage than non-"assault weapons" is objectively false. A non-"assault weapon" rifle (e.g., an AR-platform rifle without Enumerated Features) having an identical barrel to and firing the identical cartridge as an "assault weapon" will exhibit virtually the same projectile effect on a target at impact.

49. Those that ascribe wounding ability or velocity to a particular type of firearm without specifying the actual cartridge and projectile are misleading the reader, intentionally or not.

50. I am aware of AR-15 type weapons chambered in cartridges from 9mm Luger to .50 Beowulf. The AR-10 series (larger but functionally similar to the AR-15) is also banned by this law and includes chamberings up to at least .300 Winchester Magnum.

51. The FD338 is a semiautomatic rifle chambered in .338 Lapua magnum. It contains features that would render it banned under this law. It is advertised as "The world's finest .338 Lapua Magnum AR".

52. Within each caliber there are multiple types of projectiles. With respect to the .223 Remington, I am aware of projectile weights from 40 to 90 grains. In general terms, it is reasonable to believe that the lighter projectile weights will be launched with higher velocity than the heavier projectile weights. Without specifying the actual loading, it is impossible to accurately state a muzzle velocity.

53. Projectiles are manufactured using multiple methods. Those designing projectiles intentionally change design characteristics to attain desired terminal performance goals. It is not uncommon to have two cartridges that will fire in the same rifle but have drastically differing terminal performance. Therefore, attributing any terminal effect to a projectile impact based solely on the launch platform is misleading and, perhaps, disingenuous.

54. Based on the above, it is my opinion that any statement as to specific gunshot tissue damage which does not specify, at a minimum, the cartridge, projectile and velocity should be discarded as incomplete.

55. Also based on the above, it is my opinion that any statement as to specific gunshot tissue damage which is attributed only to a style of firearm should be discarded as incomplete.

56. Furthermore, when discussing the totality of firearms banned under this law, discussions centering on the .223 Remington/5.56mm NATO are curious when it is at the lower end of the centerfire rifle options available. One must wonder why it is singled out while cartridges with far more wounding potential are ignored.

57. Finally, it is telling that the U.S. Military is in the process of moving away from the 5.56 in favor of a larger caliber.

Energy (Kinetic Energy)

58. Energy, alone, is a sophomoric method of describing the effectiveness of a projectile launched by a firearm. It is notable that knife and arrow wounds typically have very little energy as compared to firearm launched projectiles yet are capable of inflicting great injury.

59. The energy value is more heavily influenced by velocity than mass as the velocity is squared. Energy = bullet weight(grains)*Velocity^2(fps)/450,400

60. As previously stated, the banned firearms are offered in a large selection of chamberings. Based on a cursory review of projectiles and launch velocity, it is reasonable to say that AR-type rifles have the ability to launch projectiles with muzzle energy in the range of approximately 350 to above 5,000 ft.-lbs.

61. Additionally, if one was to assign value to energy, knowledge of the amount of energy transferred would be necessary to estimate wounding potential. This is best demonstrated by comparing two projectiles with identical energy:

> The construction of projectile A results in it passing completely thru the body and continuing.
>
> The construction of projectile B results in total fragmentation, all pieces of which remain in the body.

62. They cannot be considered equal as projectile B obviously transferred more energy than projectile A.

63. Based on the above, it is my opinion that any claim as to specific gunshot tissue damage which is based solely on muzzle energy should be discarded as incomplete.

Rate of fire/Rounds per minute

64. Claims made about increased rounds per minute causing more victims and injuries per event are misleading. A round is one complete cartridge. Some rounds have multiple projectiles. As previously pointed out, it is the projectile which causes injury.

65. Rounds per minute does not equal projectiles launched per minute. A 12 gage shotgun with a 3" cartridge of #4 buckshot fires 41 .24 caliber projectiles with each pull of the trigger – yet is not banned under this law.

66. Similarly, it is certainly reasonable to believe that a person in a self-defense situation would have a need to fire 1 round every 1.3 seconds (e.g., 3 rounds in about 4 seconds or 45 rounds/minute).

67. Based on the above, it is my opinion that references to rates of fire based on rounds per minute are inflammatory and misleading.

Comparing rifle cartridges to handgun cartridges

68. It is well recognized that the projectiles fired by rifle cartridges typically have more potential to cause trauma than those fired by handgun cartridges.

69. As previously pointed out, the AR-15 family of firearms is available chambered in handgun cartridges.

70. Based on my testing and experience, there is frequently little terminal difference between a handgun cartridge fired from a handgun vs. fired from a rifle/carbine.

71. Therefore, any statements comparing the terminal performance of AR-15 type weapons, without specifying the chambering, to any other weapon is incomplete and misleading.

Prohibited Features

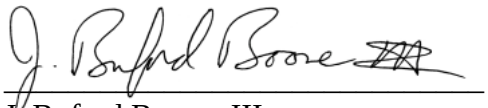
72. This law prohibits any semiautomatic firearm that has both the capacity to accept a detachable magazine and one or more of:

- thumbhole stock
- folding, telescoping, thumbhole or detachable stock
- flash suppressor
- shroud attached to the barrel that partially or completely encircles the barrel
- grenade launcher

73. None of the above attributes has any effect on the performance of the projectile (which bears sole responsibility for causing tissue damage) that is launched from the firearm.

74. In my opinion, it is misleading and disingenuous to relate increased control to increased terminal effect. Control characteristics have absolutely no effect on the terminal performance of the projectile. They do, however, increase the ability to use the firearms safely and effectively for lawful purposes, like self-defense.

I declare under penalty of perjury that the foregoing is true and correct. Executed within the United States on March 23, 2023.



J. Buford Boone, III
Declarant

EXHIBIT A

Data Analysis of .223 Caliber Ammunition

Penetration Capabilities of Law Enforcement Ammunition

This presentation consists of data accumulated from the FBI's "Weapons Selection" test, San Diego County Sheriff's Department's "Structural Penetration Testing" and the Drug Enforcement Administration's "Construction Material Test" and is use with their permission

Purpose of ATF's Presentation

- **Simplify data currently circulating in the Law Enforcement Community**
- **Dispel myths about ammunition**
- **Allow informed decisions of ammunition choice**
- **Facts of Ballistic superiority**

Basic Terminology

- **Ballistics**
- **Terminal Ballistics**
- **Effective Penetration**

Ballistics

- **The science dealing with the motion and impact of projectiles**

Terminal Ballistics

- How the projectile reacts once it hits an object
- The projectile's effect on the object

Effective Penetration

- 12 - 18 inches
- Less than 12 inches, unlikely to reach vital organs from some angles
- More than 18 inches, unlikely to damage additional vital organs

Consideration of Under Penetration

- **Failure to incapacitate subject**
- **Subject may cause injury to Agents and innocent parties**

Consideration of Over Penetration

- **Exits subject's body and wounds others**
- **Some projectile's penetration can be increased as a result of penetrating through an intervening barrier (plywood, dry wall, steel)**

Ammunition and Weapon Consideration

- **Operational use**
- **Ballistic Superiority**
- **Threat to Innocent Parties**

Considerations for Operational Use

- A number of ATF arrests involved arrests take place in and around vehicles or making entry into residences
- Vehicles provide cover and concealment for agents and suspects
- Interior and exterior walls of a residence provide cover and concealment
- There is an increasing number of suspects using body armor

Ballistics Superiority

- Shotgun (slug) and rifle/carbines are always ballistically superior to other choices
- Handguns and subguns have similar ballistics
- Shoulder weapons are tactically superior
- Use of shoulder weapons will increase hit probability

Threat to Innocent Parties

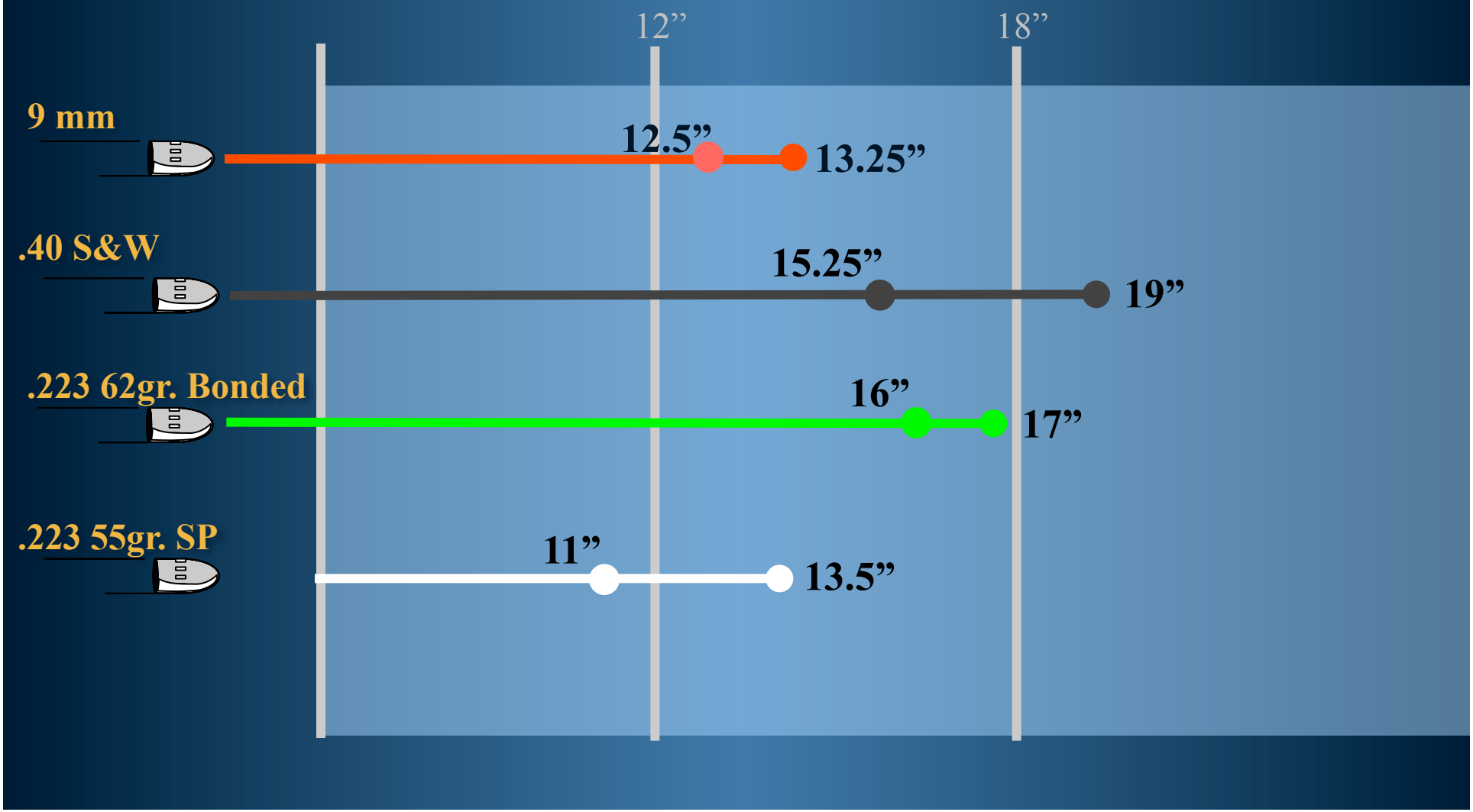
- Approximately 80% of rounds fired in Law Enforcement shootings miss the intended target according to FBI static's
- All missed shots will eventually hit something
- It is believed that the use of a shoulder weapon will increase hit probability
- What happens next will depend on the projectile and what it hits

How far will a projectile travel before it falls 60 inches to the earth?

- **This calculation is based on the assumption that an average person would fire a weapon from a height of 60 inches, Center mass to a target at the same height.**

– 870 Shotgun - 12ga. Slug	200 yards
– MP5 - 9mm	200 yards
– M-4 - .223cal.	500 yards

FBI Bare Gelatin Test



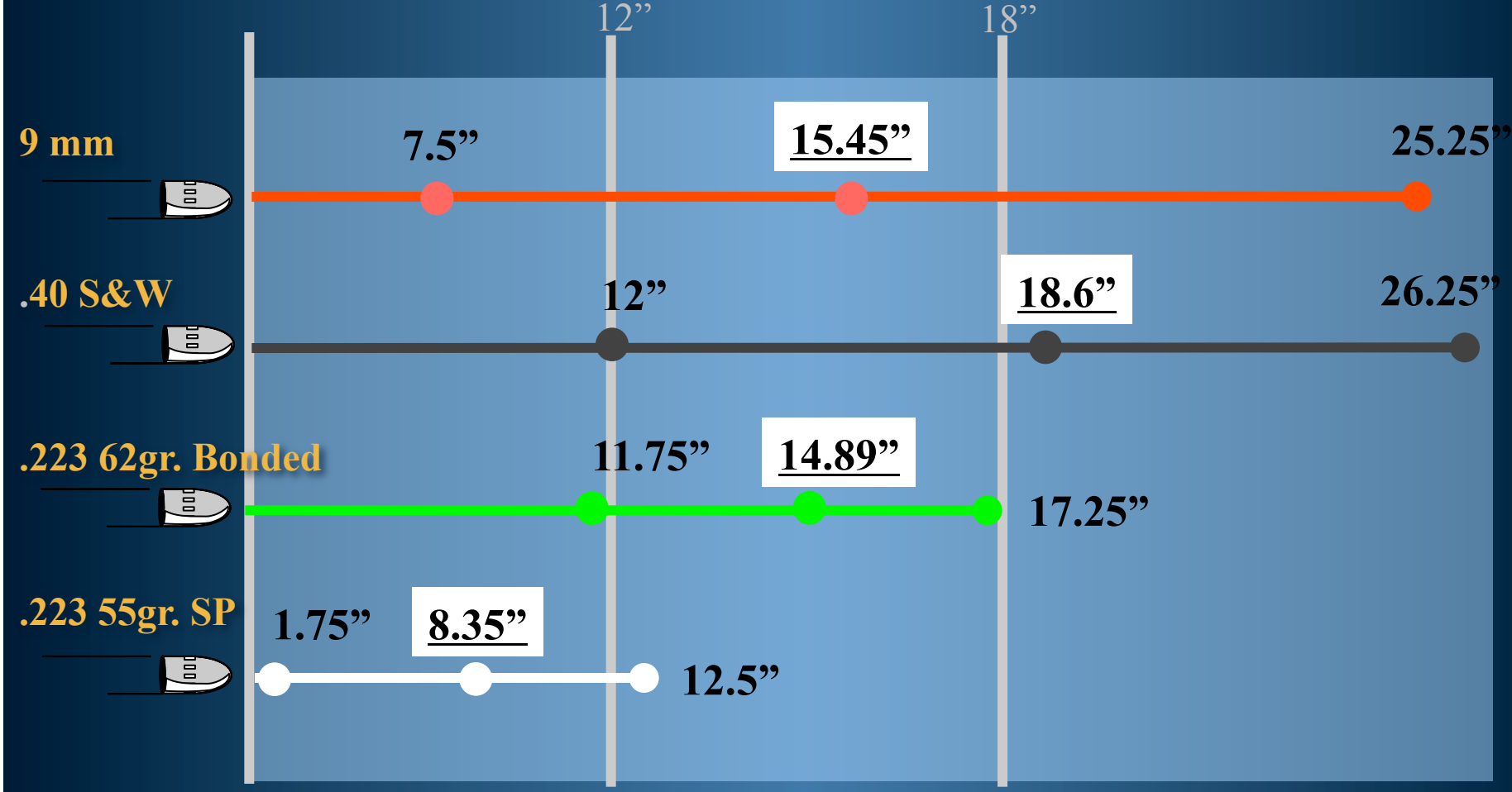
Penetration Tests

- FBI penetration test
- San Diego penetration test
- DEA penetration test

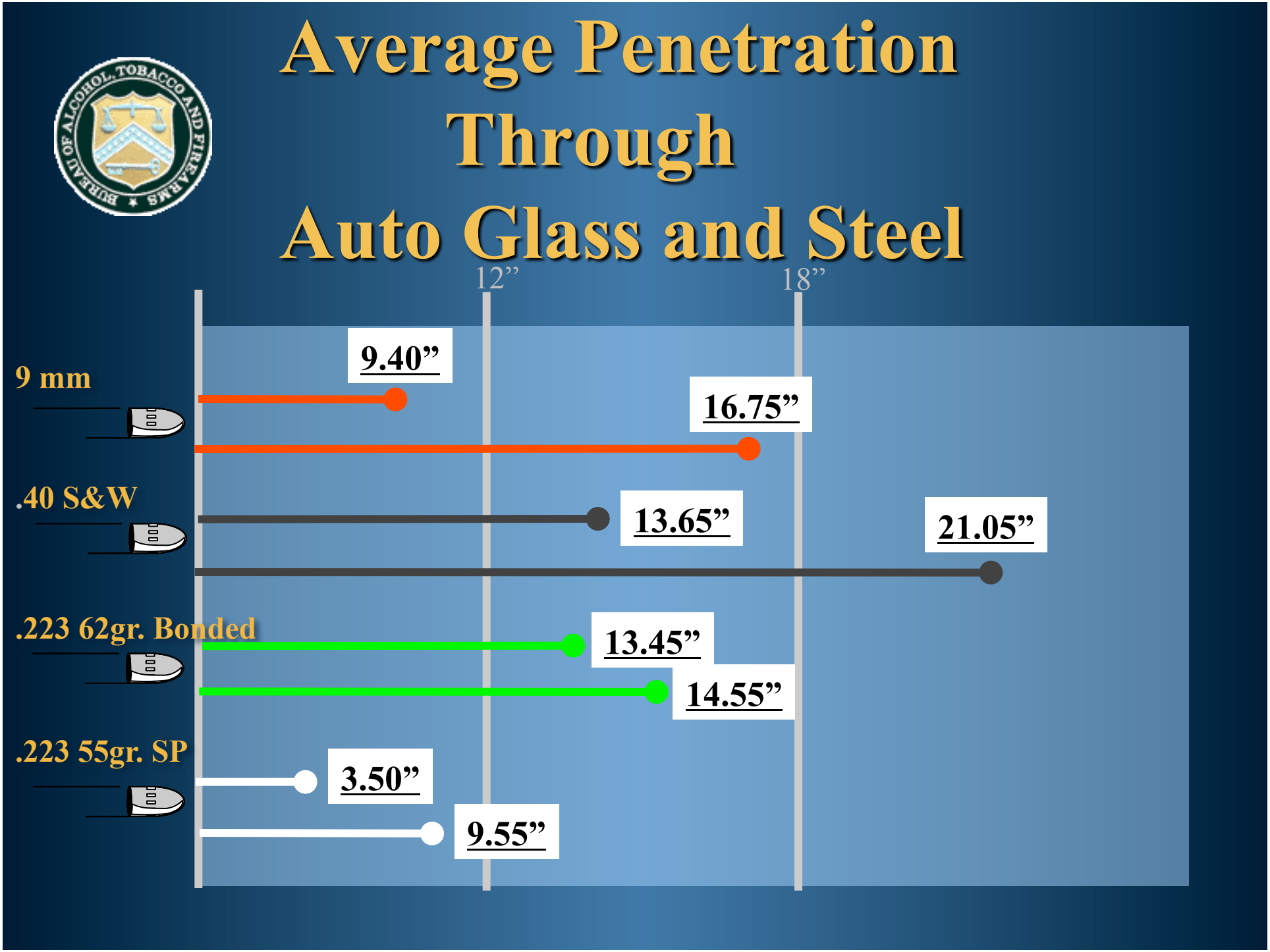
FBI Penetration Test

- Consisted of firing through a variety of different material barriers into ballistic gelatin
- Barrier Materials
  - Steel car door
  - Automobile glass
  - Plywood
  - Drywall
  - etc.

Combined Penetration Averages Through Medium Into Gelatin



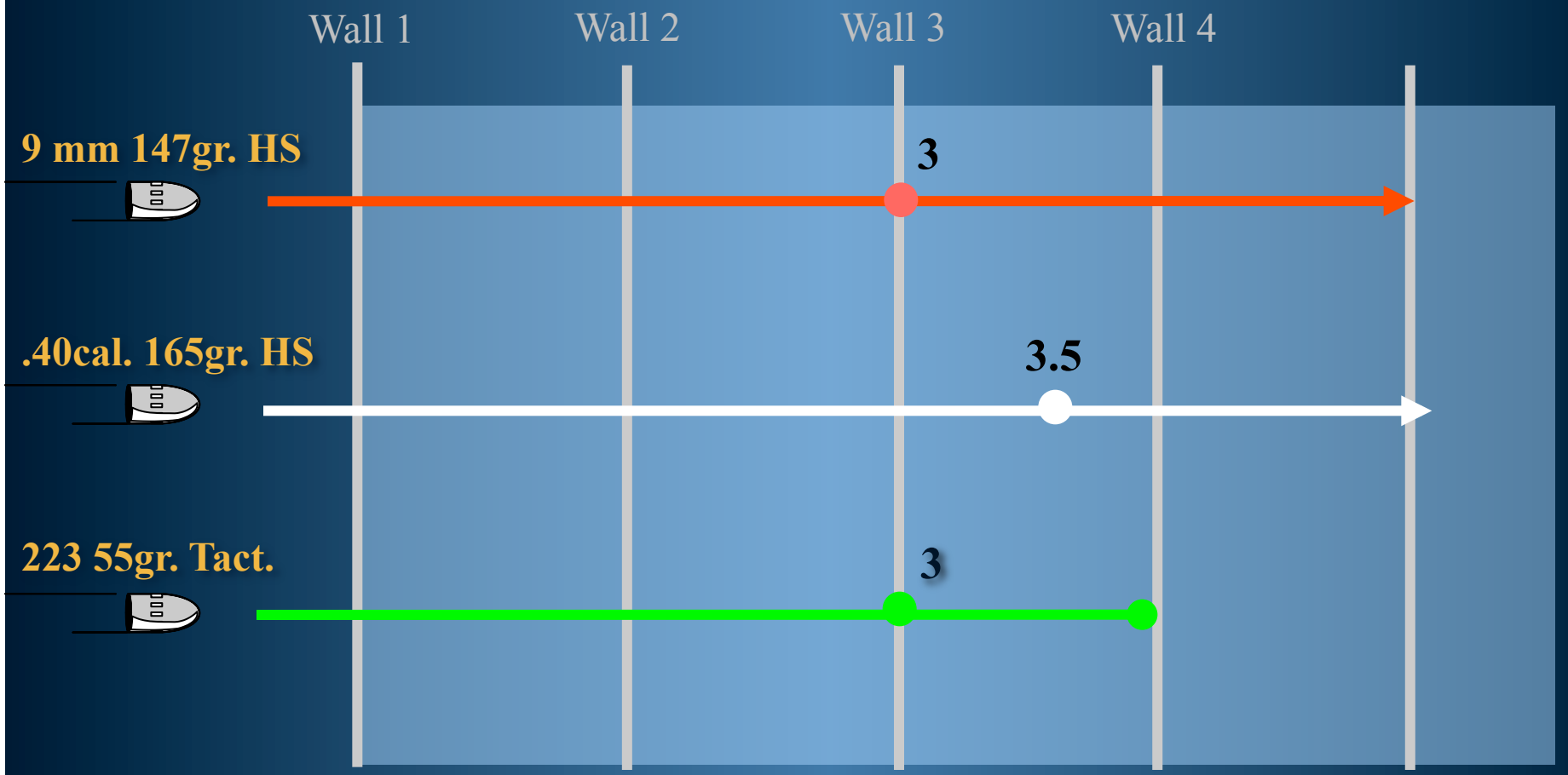
Average Penetration Through Auto Glass and Steel



San Diego Wall Penetration Test

- Consisted of firing rounds through 4 walls approximately 5 yards apart. The walls were constructed of various materials to include:
  - 1/2” Wood Siding
  - Stucco material
  - Insulation
  - 1/2” Gypsum
  - Cinder block

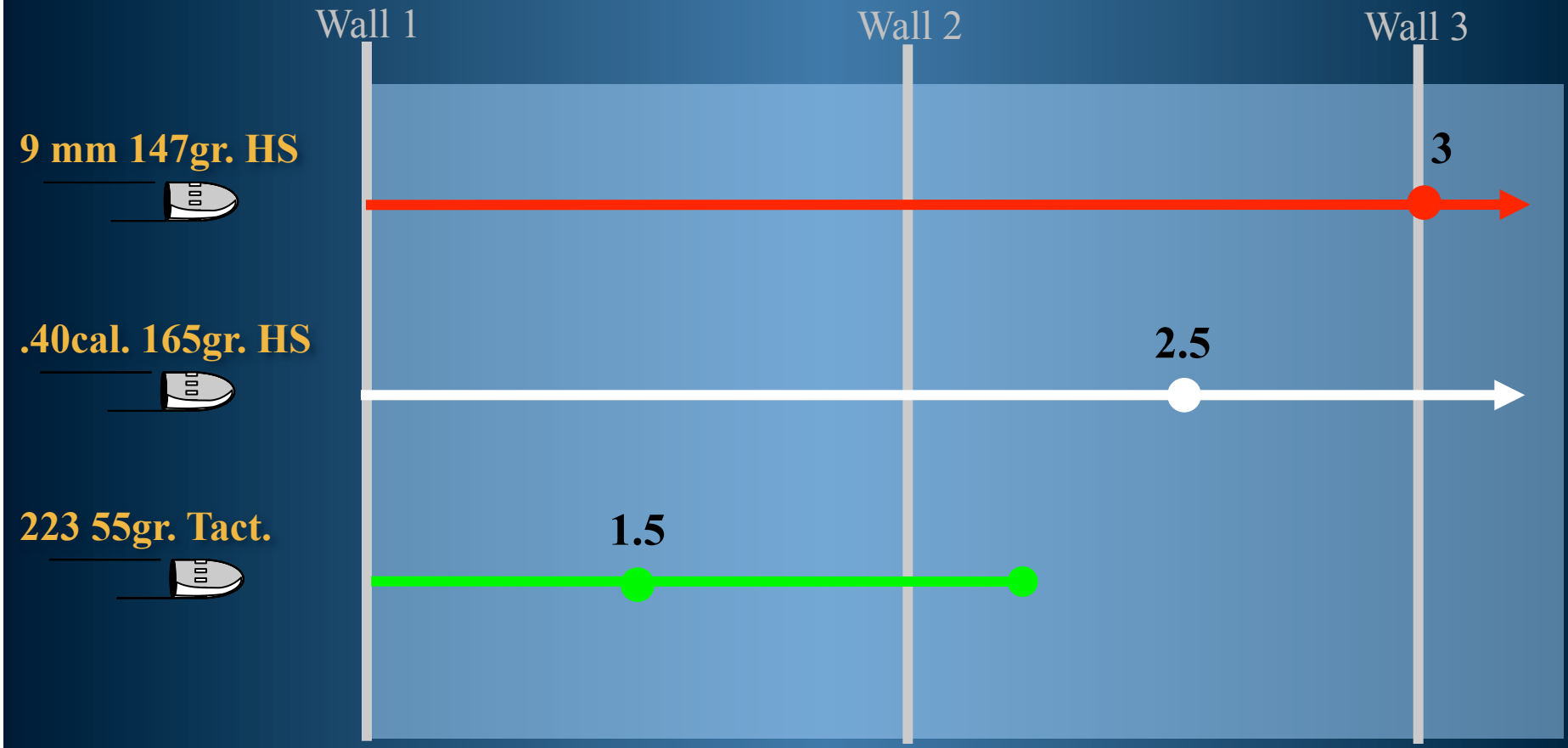
Combined Wall Penetration Averages



DEA Wall Penetration Test #1

- Consisted of firing rounds through 3 walls approximately 2 yards apart.
- Wall #1 was constructed of:
  - 1 sheet of 1/16” plastic siding
  - 2 sheets of 7/16” plywood
  - 1 sheet of 9/16” hard insulation
  - 2” of soft insulation
  - 1 sheet of 1/2” drywall
- Walls # 2 and #3 were constructed of:
  - 2 sheets of 7/16” plywood
  - 2 sheets of 1/2” drywall
  - 2” of soft insulation

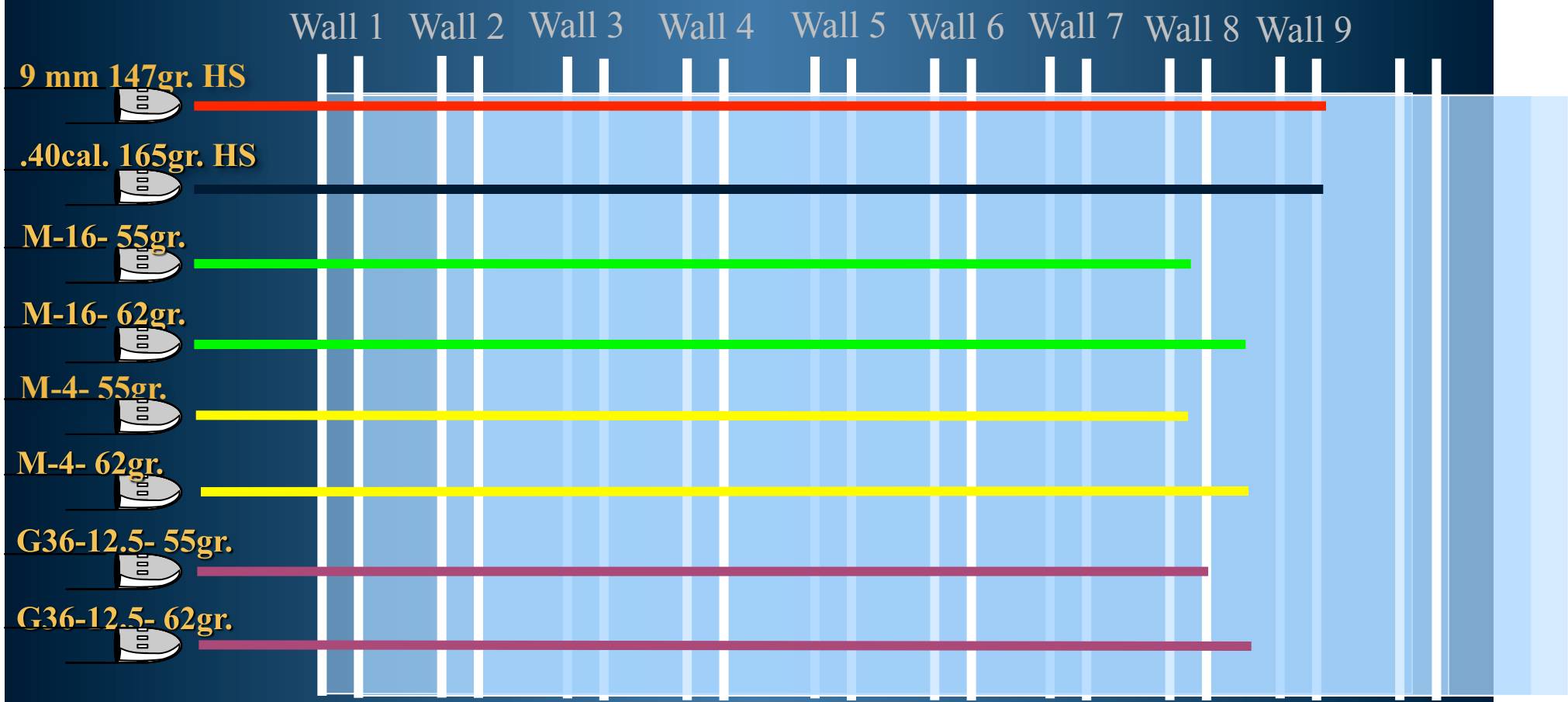
Combined Wall Penetration Averages



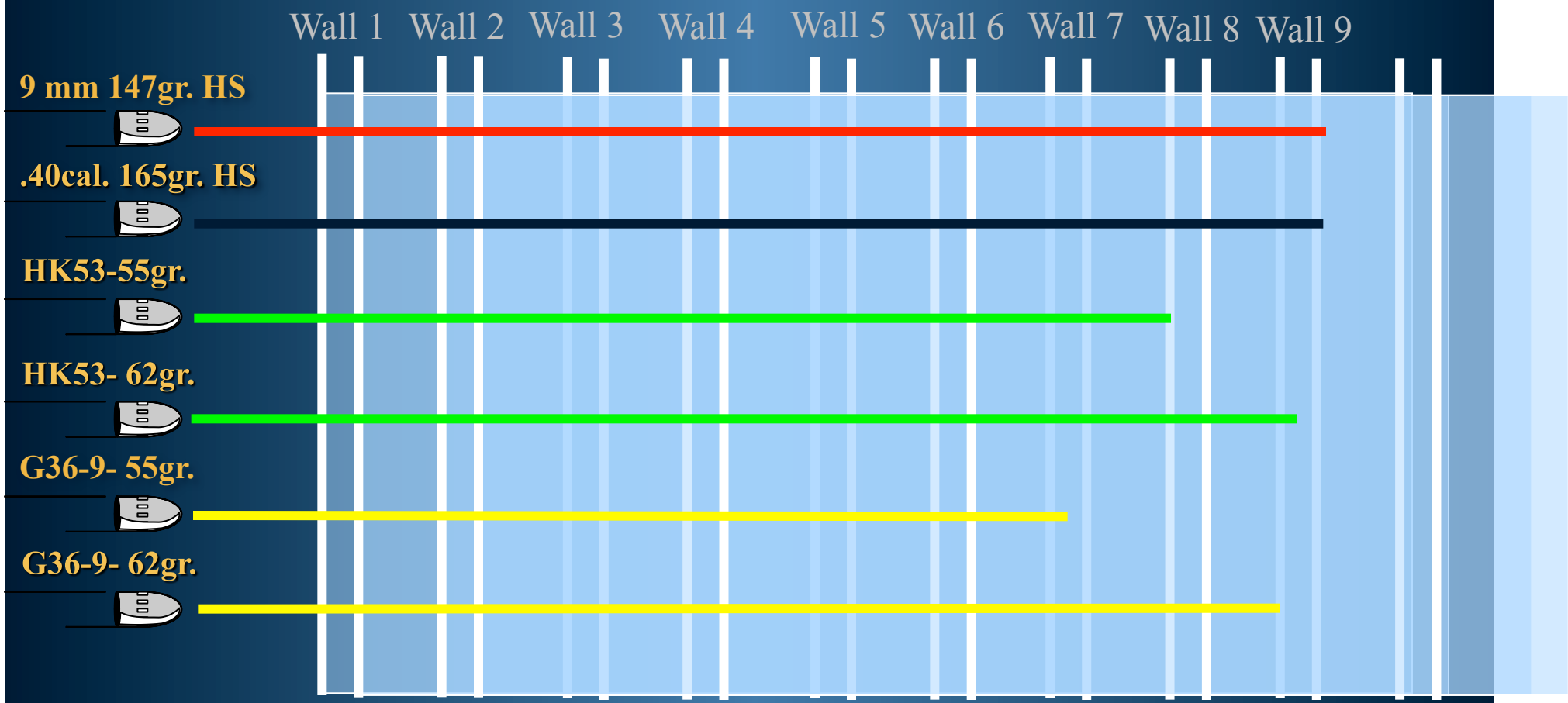
DEA Wall Penetration Test #2

- Consisted of firing rounds through 9 walls approximately 4 yards apart.
- Walls #1 - #8 were constructed of:
  - 2 sheets of 1/2” drywall, this simulates the construction of an interior wall of a residence
- Wall # 9 was constructed of:
  - 1 sheet of 1/2” drywall
  - 1 sheet of 7/16” plywood
  - 3” soft insulation
  - 9/16” hard insulation
  - 1/16” plastic siding, this simulates the construction of an exterior wall of a residence

Wall Penetration Test
9mm & 40cal.
vs
.223cal. 55 & 62gr.



Wall Penetration Test Continued



Results of Data for ATF's Mission

- **Weapon of choice**
  - ✓ Colt M4